OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY

Copy to mike / Norm

January 24, 1992

To: Doug Liden, USEPA Region IX, WMD, Permits

From: Sheila Wiegman, ASEPA SW

RE: Draft Cannery Permit Comments

You've done a good job! My comments are the following:

1. The limit and monitoring for total residual chlorine are not warranted. The thaw water from Samoa Packing is from the ASG water system and is recirculated several times to thaw fish before it goes to the DAF. Star-Kist uses harbor water for thawing and this is not chlorinated. The amount of water used for can washing is small in relation to the water used for plant cleaning and fish thawing, which also originates from the ASG water system. The cleaning water and thaw water are mixed with any can cleaning/washing water in the DAF. The cleaning water and thaw water contain significant amounts of nitrogen. Any remaining chlorine at that point would likely be in the form of chloramines which would be oxidized to other nitrogen containing compounds eliminating the chlorine residual. The WQS for chlorine is to prevent overchlorination in wastewater treatment which leads to trihalomethane formation which is carcinogenic and toxic to fish.

2. On page 4 under 1. Proposed Biomonitoring, change quarterly to semiannual.

3. Both ASEQC and ASEPA are referred to in the permit and this may be confusing. I suggest using American Samoa EPA or ASEPA in the document except when referring to the approval of the mixing zone.

4. On page 5, the "Director of Health" is referred to in the fourth parasgraph. This should be American Samoa EPA.

5. I believe Ceriodaphnia dubia is (p. 4) a freshwater species and I am not sure if this is appropriate for a marine discharge.

6. On page 6, it refers to a list of locally available species, but this is not provided nor has it been compiled.

7. On page 6, under D. Receiving Water Quality Monitoring Program, paragraph 2, you should state that the impacts would occur in relation to the discharge.

8. Point E and F should not be monitored in the water quality monitoring program as we discussed.

9. The statement on locating the stations for water quality monitoring on page 7 should be removed.

10. Under dye studies, I suggest it should be dye or tracer studies. The cost of these studies should not be prohibitive.

11. On the Sediment Monitoring Section, I have the following comments:

a. This is only sediment monitoring, not biological, and the first sentence should reflect this.

b. The section you included starting with the fourth paragraph should be deleted, except for oxidation-reduction potential should be added in the sentence on analysis in the second paragraph. Replication is not necessary for these analyses. Priority pollutant and pesticide analysis is not necessary as the ASG has previously completed this.

12. I suggest the coral reef survey be deleted. The section on dye study could state: Should the dye studies reveal to the American Samoa EPA and the USEPA that the reef proximate to the diffuser or any other critical habitat may be impacted, a survey shall be conducted to verify this within six months of the finding. The plan of study for the survey shall be submitted to the American Samoa EPA and USEPA and approved prior to its commencement.

The Department of Marine and Wildlife Resources was consulted on this requirement and responded that it was not necessarily warranted as the reef originally was not pristine and it is difficult to tie reef degradation to the effluent as there are a range of uncontrollable factors which affect the reef. The El Nino effect has recently been tied to coral reef die off. The reefs in American Samoa and much of the South Pacific experienced near depletion due to attack of crown of thorns starfish approximately ten years ago. The reefs are just beginning to recover.

13. In the Statement of Basis,

a. The EQC should be written out as Environmental Quality Commission (EQC).

b.The ASG cannery consent agreement and other elements of the cannery waste disposal scheme are not referred to. Pat Young can assist.

c. Under II. Effluent Limitations, you refer to "desalinization processes"?

d. Under K. Pago Pago Harbor Monitoring Program, you refer to the discharge area as pristine. This is not true as it is surrounded by increasing development and human use and is highly used as a transportation channel. You could say less degraded.

e. On the Harbor-Wide Circulation requirement, the current patterns are known and addressed in a number of documents. It would have been impossible to construct models of the harbor without some knowledge. A circulation study would likely provide us with finer details.

f. The sediment monitoring is not biological monitoring. The main purpose of the monitoring is to determine the character of the sediments in relation to long term high nutrient discharge by the canneries in the harbor and if harbor recovery will be affected by resuspension of the nutrients.

Call me if you have any questions.

OFFICE OF THE GOVERNOR
ENVIRONMENTAL PROTECTION AGENCY

Doug - Call me to discuss. I got your revisions. Thanks.
Pat 2/3

January 31, 1992

To: Pat Young, USEPA, OEA, OPINAP
Doug Liden, USEPA, WMD, Permits

From: Sheila Wiegman, American Samoa EPA

Re: Comments on Cannery Draft Permit

I have reviewed the latest (1/30) draft of the cannery permits and would like to pass on these comments:

1. As previously stated, the inclusion of an effluent limitation for chlorine is not appropriate nor scientifically justified in the cannery permit. It is highly likely that any chlorine will residual will remain in the effluent. Please provide the scientific justification for this effluent limitation, should you include it in the permit. Star-Kist does not use chorinated water for thawing, only Samoa Packing does and this is recirculated several times before going to the DAF. Most water used at both plants is conserved, i.e., boiler water is used for can washing water. Retort water is stored and reused. This in addition to the mixing with the nitorgen containing wastewater contributes to diminishing any remaining chlorine residual. This advice comes from the agency responsible for writing and implementing the American Samoa Water Quality Standards (ASWQS), and who has the lead role in interpreting the ASWQS.

2. The ASG is anxious or probably more anxious than the USEPA to obtain data on impacts to Pago Pago Harbor ecosystem, but as stated in the ASEPA memo of January 24, 1992, a survey of the coral reef is not justified due to the myriad factors which impact the reefs in Pago Pago Harbor. In specifying this requirement, real impacts of the cannery discharge may be missed. What if the effluent affects some other part of the reef or another habitat in the harbor because of the dispersion and not that particular reef? It states impacts to the coral reef "must be recognized immediately". This is impossible to do without frequent surveys (monthly) and the calculation of coral cover, species diversity, etc. Only the coral reef is mentioned, what about the biotic community? A real coral reef survey would be prohibitively expensive, so it is likely any cannery effort would be meaningless. The requirement as it is now worded is very general. It should provide objectives and examples of what a coral reef survey should include. I am concerned that in negotiation with the canneries on the monitoring program, the canneries may suport this element and reject one of the others which has markedly more meaning. A video of the reef is not adequate to document real, statistically reliable impacts. This advice is provided by the ASEPA and DMWR who both have familiarity with the marine environment, pollution problems, and documentation on Pago Pago Harbor.

It is important that ASEPA and USEPA agree on the monitoring program before providing this to the canneries. Should you decide to include this provision in the draft cannery permits, please consult with ASEPA and provide a scientific rationale for the requirement before release to the canneries.

I suggest use of the language previously submitted. In additon, more meaningful objectives must be provided to the canneries for a meaningful study.

3. P. 5, paragraph 5, "species below" is stated, but no species are listed below.

4. Language on use of microwave positioning device (p.6) is still included and this is not possible in American Samoa..

5. Please add oxidation-reduction potential and sulfides as parameters for sediment monitoring (p.7).

6. P. 12, discrete and grab are the same thing.

7. Oil and grease must be grab as stated in Standard Methods. I believe the canneries were compositing 4 grab samples previously.

8. P. 22, last paragraph, should with be wish?

9. P. 21, the mixing zone was approved on November 27, 1991.

10. On p. 10, the section on monitoring is appropriate. Some ambient data may not be available for the last month of the quarter. AECOS is usually 2-3 months behind after we send the samples.